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Essay on
Reason & Instinct
by
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Inaugural Dissertation

on

Reason and Instinct

Gent.ⁿ In an attempt to compose an inaugural dissertation, it might seem, that a desire to avoid the suspicion of arrogance or presumption, would demand an apology for its numerous imperfections. The duties which are exacted from a student during his attendance on a course of Lectures are so numerous & laborious, as almost totally to preclude a possibility of complying, either with the established rules of rhetoric, with grammatical propriety, or that explicit elucidation, which the importance of the subject may demand, could, at the expence of other duties of perhaps more real importance. I shall therefore conclude these observations by quoting a remark of the justly celebrated Heberden, in which he says "We should first learn, then practice, & afterwards write". The subject of the following essay is that of <u>reason</u> & <u>instinct</u>, and among the many opinions which have been advanced on it at different periods, none have more generally prevailed than the one which considers reason as peculiar to man, and instinct as appertaining to the lower orders of animals alone. Although this opinion has so generally prevailed, & has even been supported by the learned & amiable Addison in the "Spectator

tor, that pleasing & delightful source of useful instruction to all its perusers, yet I feel confident in believing that had his acquaintance of natural philosophy, extended to some facts which subsequent discoveries have brought to light, his confidence in the doctrine which he then advocated would have been much shaken or destroyed. At the very commencement of our inquiry, a difficulty presents itself of no small magnitude. It is all important that the individual whose ideas we would wish to learn, should convey to us by the powers of language, his sensations, his desires, his inclinations, his antipathies, his trains of thought &c. from impressions from without. In the human species when these are not expressed by language, the countenance, the mirror of the mind reflects at times, with unerring certainty the operations which are going on within; while in the inferior animals, though the countenance is to a certain extent, expressive of their feelings, yet we acquire but little information from it; & as it relates to language, it is well known, we receive none from that source. Our knowledge then of the motives which actuate the brute creation &c. to certain actions.

must necessarily be derived from an attentive observance of these actions; & when we find them ~~too~~ correspond with those we are accustomed to perform ourselves, under the influence of the dictates of reason, we are assuredly sanctioned by the decisions of philosophical fairness, in attributing them to the same cause. It may be here necessary to define terms, & the definition of reason given by Charles Fothergill in his essay on natural history, is the one which will be adopted; viz: the faculty of distinguishing between good & evil, of calculating future consequences, & of discerning the fitness of things. By instinct is meant that innate principle which spontaneously & intuitively directs the living possessing it, to the performance of certain actions, independently of any distinction, calculation or discernment, except so far as it relates to the impulse of that principle; as the duck & the water snake betaking themselves to the water as soon as they are liberated from the shell, & the young of several mamalia immediately applying themselves to the teats of their mothers, after birth. These are all illustrative of the principle we denominate instinct. A question arises, can the actions we observe animal, to perform

be accounted for on the principle of instinct alone? I answer, that the biographies of animals are pregnant with facts fully illustrative of the negative of this question, & if actions have been observed, which are inadequately explained on the principle of instinct alone, then some other principle must be called in to its aid; & I hope to show that this auxiliary is reason. Bolton the ingenious author of of the "Harmonia Rurali" relates the following interesting fact," On the 10th. May 1762 I observed a pair of Goldfinches beginning to make their nest in my garden. They had formed the ground work with moss, grass &c, as usual: but when I scattered parcels of wool in different parts of the garden, they left off those of their own stuff, & employed the wool; afterwards, I gave them cotton, on which they rejected the wool, & proceeded with the cotton, on the 3rd. day I supplied them with fine down on which they forsook the cotton & finished their work with the down. Now the conduct of these little beautiful architects, not only evinced a frugality on their parts, but also, by the act of determining, showed the capability of operations of reasoning. No person could have

have selected with better judgement, the article best adapted to their purpose. In the Medical Repository of New York a Mr. Simpson has published the following fact. "During my residence" says he "at Wilton, early one morning I heard a noise from a couple of Martins that were jumping from tree to tree, adjoining my dwelling. They made several attempts to get into a box fixed against the house, which they had before occupied but they appeared to fly off with the greatest dread, repeating those loud cries which first drew my attention. Curiosity led me to watch their motions, After sometime a small Wren came from the box & perched upon a tree near it, whose shrill notes seemed to amaze her antagonists. After a short time the Wren flew away. The Martins took this opportunity of occupying the cage, but their stay was short. This diminutive adversary returned & made them fly in the utmost precipitation. This kind of contest was kept up the whole day & the Wren kept possession during the night. The following morning the Wren having left the nest, the Martins con-

mediately reentered this mansion, broke up their own nest of twigs of several sizes, & setting to work with more ingenuity than I supposed they possessed, they soon barricaded this door. The Wren returned, but could not enter. She then attempted to storm the work, but failed. I would not say that the Martins followed our modern rule of tactics, by carrying with them a sufficiency of food to maintain a siege, or that they made use of sustenance which necessity, sometimes, during a long & bad storm might probably occasion: but they persevered for near two days to defend the entrance within the barricade. The Wren finding she could not force an entry, raised the siege & left the Martins in quiet possession without further molestation. In the conduct of these martins invention & foresight are eminently displayed, & the faculty of judgement & reason clearly manifested. Would not the most intelligent person, placed in the same circumstances, have acted in the same way? This act could never have been taught by any education, for it resulted from the peculiarity of the circumstances. I would therefore consider it

as a voluntary act dictated by (a principle of) uncommon intelligence.
Dr. Fathergill in a late work on the philosophy of Natural History relates the following fact on the authority of Pontoppidan besides several instances of the same kind observed by himself which confirms his belief of its correctness. A Norwegian Fox was seen near a fisherman's hut employed in laying a considerable number of codheads in a row, & having secreted himself behind them, he made a beaty of the first Crow that came to devour them. The following singular & interesting fact of the mode by which the same animal rids himself of the fleas which at times ~~pester~~ him, is related on the same authority. "He takes a bunch of moss or straw in his mouth, & by gradually stepping backward into the water, the insects retreat from the water & get into the dry moss, at which time the Fox lets it fall & runs off, exulting in the success of his stratagem. In a letter from Sir John Harrington to Prince Henry, son of James 1st. dated Relston June 14th 1608. & subsequently published, in the Gentleman's Magazine, we have a very interesting account of a dog, the property of Sir John, that was remarked for his

sagacity & ingenuity. "Having been sent with two charges of sack wine, the apparatus by which he carried it became deranged, so that he could not proceed. He then took one of the sacks & concealed it under some rushes & grass, & conveyed the other in his mouth; returned & conveyed the one he had concealed. This fact Sir John says was observed by a number of labourers working in the vicinity of the scene. Mr. Dugald Stewart in his 1 vol. of his Philosophy of the human mind, mentions the following interesting anecdote, which is related by Mr. Baily in his letters on animals, addressed to Mr. L. Ray. One of his friends, a man of intelligence & veracity, had a very intelligent monkey, to which he gave nuts as an amusement. Having placed them out of the reach of the monkey, the animal after having made several fruitless attempts to get them, observing a servant passing with a napkin under his arm, which he snatched and was thereby enabled to procure the nuts. This animal also displayed great ingenuity in his mode of cracking them, which he effected in the following manner, having placed them on the ground he let fall on it from a height a stone sufficiently heavy to break

it. If the ground was soft, the monkey would, (having seen that in this case the nut would sink & not break) obtain a tile & place the nut on it & proceed as in the first instance. It may be stated in answer to this anecdote, that the monkey being an imitative animal, wished to crack his nuts in the manner he did, by observing boys perform the same process; Even that, however would display considerable attention. We must ascribe to his ingenuity the plan he adopted to prevent it sinking in the ground, & also in elevating the stone to a considerable height, for that is not the common mode even among boys for cracking nuts, & whether the monkey knew anything about the general law, that bodies acquire force in falling, or not, it seems that he was conscious that there was an advantage in it & therefore done it. Having produced these miscellaneous facts which might be increased ad infinitum almost, as so many proofs of at (least) the ingenuity & invention of individual animals, let us direct our attention to those races of animals, which live in society & unite their efforts to the attainment of one common end. It has been long observed that these animals indicate by their ac-

tous, a species of mental endowment much superior to those that inhabit forests, & live as it were in seclusion & solitude. & the observation is equally true, whether in relation to large or small animals; though most forcibly illustrated in the insect tribes. It is chiefly to the gregarious insects, constituting as it were little republics, that we are to look for that unity of design, & combination of efforts, which are seldom surpassed in the social compact of human society. Two tribes of insects, however, the one chiefly owing to its great utility has attracted the attention of mankind. I allude to the Bees & Ants. They have at all times been regarded with interest & delight for the wonderful display of ingenuity & design, which they have evinced in the structure of their habitations & in the subordination of their societies. The younger Huber has elegantly detailed to us in the Edinburgh Review, an account of their habits, modes of transportation, quarrels, depradations, sports, amusements &c, constituting a correct miniature of human society with all its virtues & vices. Considering instinct as a principle intuitively perfect, & totally incapable of improvement, it must of nece-

sity I conceive be inadequate to the explanation of the facts above related. If then instinct will not account for them their origin must be referred to some other affection of mind, & I know of none to which they could with any justice be referred, unless to a faculty or endowment of reason, since those actions which man is accustomed to perform under similar circumstances are precisely similar to them in kind. I cannot then but incline to the belief that brutes as well as man are subject to the influence of a reasoning faculty; that man is often impelled by instinct & brutes by reason; that there is not that great difference between man & brute, as it relates to intellectual endowments, which some have supposed. That nature has separated them by a line of demarkation in their figure, texture &c. there can be no doubt. The brute can only possess that knowledge which he as an individual has acquired (in Majoritatem), while man by the aid of science & learning, can avail himself of the accumulated wisdom of preceding ages. If then brutes are possessed of reason, as the above facts tend to show,

if they possess an intellectual power, & intellect be the portion which separating from the clogs of mortality by death is to exist in the endless ages of eternity, will they not also be immortal? The answer to this important question, is that the only true assurance we have of an eternal existence here after is derived from revelation; & we have no revelation that has promised immortality to brutes.

Finis